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LISTING OF THE CLAIMS

1 1. (Original) A method for doing call classification on a call to a
2 destination endpoint, comprising the steps of:
3 receiving audio information from the destination endpoint;
4 analyzing received audio information for words using automatic
5 speech recognition; and
6 determining the call classification from the analyzed words.

1 2. (Original) The method of claim 1 wherein the analyzed
2 words are formed as phrases.

1 3. (Original) The method of claim 1 wherein the step of
2 analyzing comprises performing front-end feature extraction on the
3 received audio information to produce a full feature vector.

1 4. (Original) The method of claim 3 wherein the step of
2 analyzing further comprises computing log likelihood probability from the
3 full feature vector.

1 5. (Original) The method of claim 4 wherein the step of
2 analyzing further comprises updating a dynamic programming network
3 used in the step of analyzing in response to the computed log likelihood
4 probability.

1 6. (Original) The method of claim 5 wherein the step of
2 updating comprises the step of executing an Viterbi process.

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1 7. (Original) The method of claim 5 further comprises the step
2 of pruning the nodes in the dynamic programming network used in the
3 step of analyzing.

1 8. (Original) The method of claim 7 further comprises the step
2 of expanding a grammar network used in the step of analyzing.

1 9. (Original) The method of claim 8 further comprises the step
2 of performing grammar backtracking in response to the expanded
3 grammar network.

1 10. (Original) The method of claim 9 wherein the step of
2 backtracking comprises the step of executing another Viterbi process.

1 11. (Original) The method of claim 1 wherein the step of
2 determining comprises executing an inference engine in response to
3 analyzed words.

1 12. (Original) The method of claim 11 further comprises the
2 step of analyzing the audio information to detect tones; and
3 the step of determining further responsive to the detection of
4 tones for determining the call classification.

1 13. (Original) The method of claim 12 further comprises the
2 step of analyzing the audio information to identify energy in the audio
3 information; and
4 the step of determining further responsive to the identification of
5 energy for determining the call classification.

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1 14. (Original) The method of claim 13 further comprises the
2 step of analyzing the audio information to identify zero crossings in the
3 audio information; and
4 the step of determining further responsive to the identification of
5 zero crossings for determining the call classification.

1 15. (Original) A method for doing call classification on a call to
2 a destination endpoint, comprising the steps of:
3 receiving audio information from the destination endpoint;
4 analyzing received audio information for a first classification;
5 analyzing received audio information using automatic speech
6 recognition for a second classification; and
7 determining the call classification from the first classification
8 and the second classification.

1 16. (Original) The method of claim 15 wherein the first
2 classification is one of tone detection, energy analysis, or zero crossing
3 analysis.

1 17. (Original) The method of claim 16 further comprises the
2 step of analyzing for a third classification; and
3 the step of determining further responsive to the third
4 classification.

1 18. (Original) The method of claim 17 wherein the third
2 classification is one of tone detection, energy analysis, or zero crossing
3 analysis.

1 19. (Original) The method of claim 18 wherein the step of
2 determining comprises executing an inference engine.

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1 20. (Original) The method of claim 19 wherein the step of
2 analyzing received audio information using automatic speech recognition
3 comprises the step of executing a Hidden Markov Model.

1 21. (Original) An apparatus for classifying a call to a called
2 destination endpoint, comprising:
3 a receiver for receiving audio information from the called
4 destination endpoint;
5 automatic speech recognizer for determining words in the
6 received audio information; and
7 an inference engine for classifying the call destination endpoint
8 in response to the determined words.

1 22. (Original) The apparatus of claim 21 wherein the
2 determined words are formed as phrases.

1 23. (Original) The apparatus of claim 21 further comprises an
2 analyzer for determining another classification from the received audio
3 information.

1 24. (Original) The apparatus of claim 23 wherein the analyzer
2 is one of a tone detector, energy detector, or a zero crossings detector.

1 25. (Original) The apparatus of claim 24 wherein the automatic
2 speech recognizer is executing a Hidden Markov Model.